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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,950	01/31/2002	Caleb Clark Crye	CRYECAL-4	8771
20455	7590	03/11/2004	EXAMINER	
LATHROP & CLARK LLP 740 REGENT STREET SUITE 400 P.O. BOX 1507 MADISON, WI 537011507			HORTON, YVONNE MICHELE	
			ART UNIT	PAPER NUMBER
			3635	

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

**Application No.**

10/061,950

**Applicant(s)**

CRYE ET AL.

**Examiner**

Yvonne M. Horton

**Art Unit**

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 30 and 31 is/are allowed.
- 6) ☐ Claim(s) 1-3, 6, 10, 11, 13-15, 18, 22, 23, 26 and 28 is/are rejected.
- 7) ☐ Claim(s) 4, 5, 7-9, 12, 16, 17, 19-21, 24, 25, 27 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 46.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 21 currently depends upon claim 22; however, claim 21 cannot depend upon a claim that has not been previously introduced. Clarification and correction is required. Until receipt of a corrected claim, claim 21 has been examined as depending upon claim 20.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #3,951,730 to WENNBERG et al. WENNBERG et al. discloses the use of a structural member including a top member (1), a bottom member (2) extending generally parallel to and beneath the top member, and a plurality of wing members (3,4) positioned between the top member (1) and the bottom member (2), wherein each wing member (3,4) has a center segment (4) which is hinged, column 2, lines 29-32, to the bottom member (2) to pivot about a first axis (FA) and hinged to the top member (1) to pivot about a second axis (SA) which is parallel to the first axis (FA), and wherein at

Art Unit: 3635

least one wing (3) extends from each wing member center segment (4) and is biased to project out of a first plane defined between the first axis and the second axis, such that the structural member is transformable from a first collapsed, figure 2, condition to an expanded condition, figure 1, in which the wings (3) project out of the first planes to thereby support the top member (1) above the bottom member (2) and to resist the return of the structural member to the collapsed condition, figure 2, SEE THE MARKED ATTACHMENT. In reference to claim 2, the top member (1) and the bottom member (2) are planar sheets. Regarding claim 3, all the first axes (FA) and the second axes (SA) of the plurality of wing members (3,4) are parallel. In reference to claim 6, the structural member further comprises a fastener (hinge or glue), column 2, lines 29-32, which connects the top member (1) to the bottom member (2) in the first collapsed condition, figure 2. Regarding claim 10, the at least one wing member is a part of a strip having three sections, a bottom attachment (a) section which is fixed to the bottom member (2), a wing section (b) which is hinged to the bottom attachment section (a) along a first hinge axis (SA), and a top attachment section (c) which is hinged to the wing section (b) along a second hinge axis (FA) and fixed to an underside of the top member (1), wherein the first hinge axis (SA) is parallel to the second hinge axis (FA), and wherein the wing section has a plurality of wings, SEE THE MARKED ATTACHMENT.

Claims 13-15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #3,951,730 to WENNBERG et al. WENNBERG et al. discloses the use of a

Art Unit: 3635

structural member a top member (1), a bottom member (2) extending generally parallel to and beneath the top member (1), and at least one strip having three sections, a bottom attachment section (a) which is fixed to the bottom member (2), a wing section (b) which is hinged to the bottom attachment section (a) along a first hinge axis (SA), and a top attachment section (c) which is hinged to the wing section (b) along a second hinge axis (FA) and fixed to the underside of the top member (1), wherein the first hinge axis (SA) is parallel to the second hinge axis (SA), and wherein the wing section has a plurality of wings (3), each wing (3) extending from a center segment (4) and being biased to project out of a plane defined between the first axis and the second axis, such that the structural member is transformable from a first collapsed condition, figure 2, to an expanded condition, figure 1, in which the wings (3) project out of the first plane to thereby support the top member (1) above the bottom member (2) and to resist the return of the structural member to the collapsed condition, figure 2. Regarding claim 14, the top member (1) and the bottom member (2) are planar sheets, SEE THE MARKED ATTACHMENT. In reference to claim 15, all the first axes (SA) and the second axes (FA) of the plurality of wing members (3,4) are parallel. Regarding claim 18, the structural member further includes a fastener (hinge or glue), column 2, lines 29-32, which connects the top member (1) to the bottom member (2) in the first collapsed condition, figure 2.

Claims 23 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #3,951,730 to WENNBERG et al. WENNBERG et al. discloses the use of a

Art Unit: 3635

structural member including a planar top member (1), a planar bottom member (2) extending generally parallel to and beneath the top member (1), and a plurality of wing members (3,4) positioned between the top member (1) and the bottom member (2), wherein each wing member has a center segment (4) which is connected to the bottom member (2) to pivot about a first axis (SA) and connected to the top member to pivot about a second axis (FA) which is parallel to the first axis (SA) and wherein the first axis (SA) and second axis (FA) of each center segment (4) defines a first plane, and wherein at least one wing (3) extends from each wing member center segment (4) and is biased along a front to back axis to project out of the first plane, such that the structural member is transformable from a collapsed condition, figure 2, in which the at least one wing (3) extends generally parallel to the top member (1) and the bottom member (2), and an expanded condition, figure 1, in which each at least one wing (3) projects out of the first planes to thereby support the top member (1) above the bottom member (2) and to resist the return of the structural member to the collapsed condition, figure 2, wherein in the expanded condition, figure 1, the top member (1) is shifted in the front to back axis from its position with respect to the bottom member (2) in the collapsed condition, figure 2, SEE The MARKED ATTACHMENT.

Regarding claim 26, the structural member further comprising a fastener (hinge or glue), column 2, lines 29-32 which connects the top member (1) to the bottom member (2) in the first collapsed condition, figure 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11,22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #3,951,730 to WENNEBERG et al. As detailed above, WENNEBERG et al. discloses the basic claimed structural member except for explicitly detailing that the in the first collapsed position, the member can be rolled into a roll. Although WENNEBERG et al. is silent in this regard. The structural member of WENNEBERG et al. is disclosed as being made from materials made out of rubber, paper or plastic, column 2, lines 33-34, plastics, paper and some rubbers are very well known in the art for the flexibility. Hence, these materials have the ability to be rolled. Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the structural member of WENNEBERG et al., in its collapsed condition, could also be rolled. Rolling the structural member would allow for an ease

Art Unit: 3635

of transport wherein numerous members can be safely packed one atop the other and transported to a cite for use.

***Allowable Subject Matter***

Claims 4,7,8,9,12,16,17,19-21,24,25,27 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 30 and 31 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 4,16 and 24, the prior art of record fails to teach the use of a structural member including wing members having a center segment a at least one wing projecting outwardly therefrom; wherein the wing members form a hexagonal cell pattern.

In reference to claims 5,17 and 25, the prior art of record fails to teach the use of a structural member including wing members having a center segment a at least one wing projecting outwardly therefrom and being hinged to a top member by a first axis and hinged to a bottom member by a second axis; wherein the wing members are curved about an axis perpendicular to the first and second axis.

Regarding claims 7,19 and 27, the prior art of record fails to teach the use of a structural member including wing members having a center segment a at least one wing



projecting outwardly therefrom; wherein the fastener includes a segment of adhesive and a pull cord.

In reference to claims 8,9,20 and 21, the prior art of record fails to teach the use of a structural member including wing members having a center segment a at least one wing projecting outwardly therefrom and further including at least one finishing tab having an end wall and a fastening flap.

Regarding claims 12 and 29, the prior art of record fails to teach the use of a structural member including wing members having a center segment a at least one wing projecting outwardly therefrom and further including a base member having a projecting resilient tab corresponding to each wing.

In reference to claim 30 and 31, the prior art of record fails to teach the use of a structural member having upper and lower planar members and including wing members having a center segment a at least one wing projecting outwardly therefrom; wherein the distance between the upper and lower member is greater in the expanded condition is greater than in the collapsed condition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (703) 308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YMH

March 05, 2004



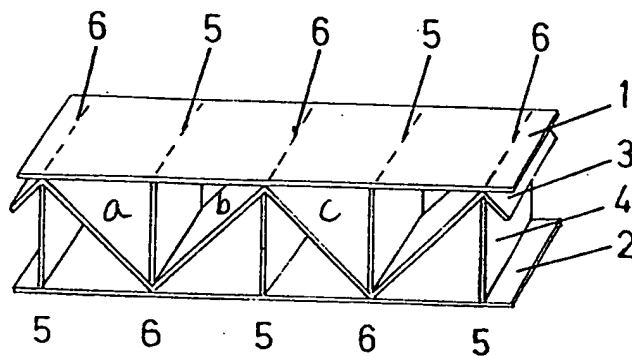


FIGURE 1

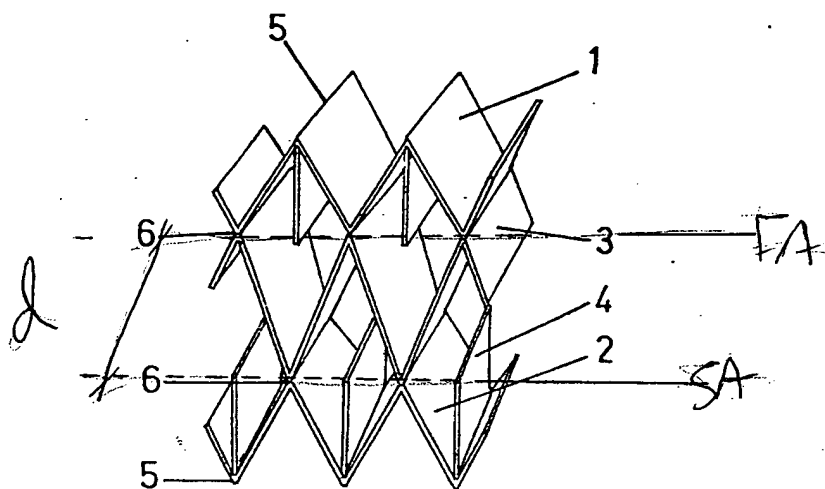


FIGURE 2

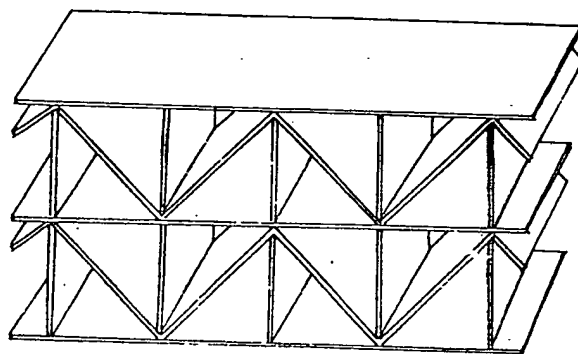


FIGURE 3